

REPORT OF ANALYTICAL RESULTS

NETLAB Work Order Number: 9G08022 Client Project: Nutrient Testing

Report Date: 18-July-2019

Prepared for:

Aaron Fox Lowell Regional Wastewater 451 First St. Blvd Lowell, MA 01852

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Work Order: 9G08022 Date: 7/18/2019 1:53:26PM

Samples Submitted:

The samples listed below were submitted to New England Testing Laboratory on 07/08/19. The group of samples appearing in this report was assigned an internal identification number (case number) for laboratory information management purposes. The client's designations for the individual samples, along with our case numbers, are used to identify the samples in this report. This report of analytical results pertains only to the sample(s) provided to us by the client which are indicated on the custody record. The case number for this sample submission is 9G08022. Custody records are included in this report.

| Lab ID | Sample | Matrix | Date Sampled |
|------------|----------|--------|--------------|
| 9G08022-01 | Inf | Water | 07/08/2019 |
| 9G08022-02 | Plt. Eff | Water | 07/08/2019 |

Request for Analysis

At the client's request, the analyses presented in the following table were performed on the samples submitted.

Sample Name: Inf

| Analysis | Method | Analyst |
|--------------------------|--------------|---------|
| Nitrate and Nitrite as N | 4500-N03-E | ESN |
| Ammonia | SM4500-NH3-D | срт |
| Total Kjeldahl Nitrogen | SM4500NH3-D | срт |
| Total Phosphorous | SM4500-P-E | DC |

Sample Name: Plt. Eff

| Analysis | Method | Analyst |
|--------------------------|--------------|---------|
| Nitrate and Nitrite as N | 4500-N03-E | ESN |
| Ammonia | SM4500-NH3-D | срт |
| Total Kjeldahl Nitrogen | SM4500NH3-D | срт |
| Total Phosphorous | SM4500-P-E | DC |

The analytical methods provided are documented in the following references:

Manual of Methods for Chemical Analysis of Water and Water Wastes, EPA-600/4-79-020 (Revised 1983), USEPA/EMSL.

Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998, APHA, AWWA-WPCF.

40 CFR 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act, Office of Federal Register National Archives and Records Administration.

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Results:

Sample: Inf

9G08022-01 (Water)

General Chemistry

| | Result | Reporting Limit | Units | Date Analyzed |
|--------------------------|--------|--------------------|-------|------------------|
| Ammonia | 23.5 | 0.5 | mg/L | 07/11/19 |
| Kjeldahl Nitrogen | 30.1 | 1.0 | mg/L | 07/15/19 |
| Nitrate and Nitrite as N | 0.04 | 0.03 | mg/L | 07/16/19 |
| Total Phosphorous | 4.47 | 0.10 | mg/L | 07/17/19 |

Sample: Plt. Eff

9G08022-02 (Water)

General Chemistry

| | Result | Reporting Limit | Units | Date Analyzed |
|--------------------------|--------|--------------------|-------|------------------|
| Ammonia | 3.4 | 0.1 | mg/L | 07/11/19 |
| Kjeldahl Nitrogen | 4.6 | 1.0 | mg/L | 07/15/19 |
| Nitrate and Nitrite as N | 10.0 | 0.75 | mg/L | 07/16/19 |
| Total Phosphorous | 2.34 | 0.04 | mg/L | 07/17/19 |

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Case Narrative

The samples were all appropriately cooled and preserved upon receipt. The samples were received in the appropriate containers. The chain of custody was adequately completed and corresponded to the samples submitted.

All samples were analyzed in accordance with 40 CFR 136 approved methodologies.

New England Testing Laboratory

1254 Douglas Avenue North Providence, RI 02904

1-888-863-8522

Chain of Custody Revolu Project No. | Project Name/Location: Quarterly Nutrients

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|--------------------------------------------|------------------------------------------|------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|---------------|---------|--|--|---------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------|----------------------------------------------|----------------------------------------|-----------------|---------------------------|-----------------|---------------------------------------------------------------------|------------------------------|----------|
| | | | No. of Matrix Containers | | WW D | | XX LA | | | | 3T=Sterile | COCCIA-T LOGAL-M HO | יייייייייייייייייייייייייייייייייייייי | r,DW=DrinkingWater,S=Soil | Date/Time Relinquished By: | ······································ | me Received Ry. | 190K | Socios House | ocios, ocivios, rerchiora | ાન | nSe |
| Client: Lowell Regional Wastewater Utility | Report To Italy Afox (a) Is Nell ma. 900 | AREON FOX | Wastewater Utility | Composition Sample I.D. | TO TE | 1 | Nood Tal. EFF | | | | Conatiner Type: P=Poly, G=Glass, AG=Amber Glass, V=Vial, ST=Sterile | Preservation Code: NP=None,N=HNO3,H=HCL, S=H2SO4,SH=NaOH M=MeOu T-1,0000 | Matrix Code: | Sw-Surface Water, WM=Wastewater, DW=DrinkingWater, S=Soil | Sampled By: Date/Time Received By: Date/Time | | Received By: | 1815 Wal 1812 Bester 1816 | icals, Radon TO | 102 | 1814 Pos 20 18/16/1000 18/14 | <u>a</u> |